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09/678,338	10/03/2000	L. David Chambers	ASTR-0003	4820

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EXAMINER	
ELALLAM, AHMED	
ART UNIT	**PAPER NUMBER**
2668	

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/678,338	CHAMBERS, L. DAVID	
	Examiner	Art Unit	
	AHMED ELALLAM	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 November 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This office action is responsive to Amendment filed on 11/10/2005. The Amendment has been entered. Claims 1-40 are pending.

Information Disclosure Statement

1. It had been noted in the previous office action that the IDS filed on April 22, 2002 is missing the form 1449. Applicant is required to submit the corresponding form in response to this office action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 5-9, 11, 13, 15-19, 21, 23, 25-29, 31, 33, 35-38, and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Andrews et al, US (5,878,130). Hereinafter referred to as Andrews.

Regarding claims 1 and 11, with reference to figures 1 and 12, Andrews discloses a distributed switching platform and a method for operating the distributed switching platform, couplable to public network including a TCP/IP network, see column 5, lines 20-27 (claimed an Internet Protocol (IP) network), comprising:

A primary central controller PCC (30) couplable to the IP network, and configured to generate control signals for controlling distribution of calls, see column 4, lines 55-67; (claimed main control unit (MCU) couplable to the IP network and configured to generate call and control processing commands);

A call service center 501 (figure 12) coupled through the WAN interface 472, (claimed switching partition couplable to the IP network) comprising:

Status/control process 504 in combination with inbound telephone network interface 68 and outbound telephone network interface 68', (claimed input output distributor (IOD)), wherein status/control process 504 transmits control signals to the telephony interface 68, 68' and to switching matrix 506 for providing a request service to or from callers 18 and or 20 (claimed access nodes), see column 14, lines 5-29. (Claimed an input-output distributor (IOD) configured to receive call and control processing commands in a packet based protocol), and a circuit-switched matrix and line interface coupled to the IOD and configured to provide an interface to a plurality of access nodes, the IOD configured to convey the call and call processing commands to the circuit-switched matrix and line interface to allow, based thereon, the circuit switched matrix and line interface, to control access to the plurality of access nodes as in claim 1, and generating a call and control processing commands with a main control unit coupled to IP network; coupling an input-output distributor (IOD) to the IP network; providing an interface to a plurality of access nodes via a circuit-switched matrix and line interface coupled to the IOD, the IOD receiving the call and control processing commands in a packet based protocol and conveying the call and processing

commands to the circuit-switched matrix and line interface to allow, based thereon, the circuit-switched matrix and line interface to control access to the plurality of access nodes, as indicated in independent claim 11).

Regarding claim 21, with reference to figures 1 and 12, Andrews discloses a distributed switching platform means coupled to public network including a TCP/IP network, see column 5, lines 20-27 (claimed an Internet Protocol (IP) network), comprising:

A primary central controller PCC (30) couplable to the IP network, and configured to generate control signals for controlling distribution of calls, see column 4, lines 55-67; (claimed main control unit (MCU means) couplable to the IP network and configured to generate call and control processing commands);

A call service center 501 means (figure 12) coupled through the WAN interface means 472, (claimed switching partition means couplable to the IP network) comprising:

Status/control process means 504 in combination with inbound telephone network interface means 68 and outbound telephone network interface means 68', (claimed input output distributor means (IOD)), wherein status/control process 504 means transmits control signals to the telephony interface means 68, 68' and to switching matrix means 506 for providing a request service to or from callers means 18 and or 20 (claimed access nodes), see column 14, lines 5-29. (Claimed an input-output distributor (IOD) means configured to receive call and control processing commands in a packet based protocol, circuit-switched matrix and line interface means coupled to the IOD means and configured to provide an interface to a plurality of access nodes, the

IOD means configured to convey the call and call processing commands to the circuit-switched matrix and line interface to allow, based thereon, the circuit switched matrix and line interface, to control access to the plurality of access nodes).

Regarding claim 31, with reference to figures 1, 5 and 12, Andrews discloses a distributed call service center (claimed enterprise call center) couplable to public network including a TCP/IP network, see column 5, lines 20-27 (claimed an Internet Protocol (IP) network), comprising:

A primary central controller PCC (30A') (primary control center 30A, as in figure 5) couplable to the IP network, and configured to generate control signals for controlling distribution of calls, see column 4, lines 55-67; (claimed primary main control unit (MCU) A Redundant central controller 30B' (Redundant central controller 30B as in figure 5), coupled to the IP network; wherein the primary and the redundant controller are geographically separated, and wherein one of the controller can assume the control of system 200, see column 9, lines 22-39. (claimed a primary main control unit (MCU) coupled to a first location associated with the IP network; a secondary MCU coupled to a second location associated with the IP network, at least one of the primary and secondary MCUs generating call and processing commands);

A call service center 501 (figure 12) coupled through the WAN interface 472, (claimed switching partition couplable to the IP network) comprising:

Status/control process 504 in combination with inbound telephone network interface 68 and outbound telephone network interface 68', (claimed input output distributor (IOD)), wherein status/control process 504 transmits control signals to the

telephony interface 68, 68' and to switching matrix 506 for providing a request service to or from callers 18 and or 20 (claimed access nodes), see column 14, lines 5-29. (Claimed an input-output distributor (IOD) configured to receive call and control processing commands in a packet based protocol, and a circuit-switched matrix and line interface coupled to the IOD and configured to provide an interface to a plurality of access nodes, the IOD configured to convey the call and call processing commands to the circuit-switched matrix and line interface to allow, based thereon, the circuit switched matrix and line interface, to control access to the plurality of access nodes).

Regarding claim 3, 13, and 23, with reference to figure 12, Andrews shows a WAN (Wide Area Interface) in connection between the central controller and the call service center 501 (claimed switching partition as in claim 3, and IOD as in claim 13, and switching partition means as in claim 23). (Claimed MCU (means) and the switching partition (means)/ IOD are geographically separable).

Regarding claim 5, 15 and 25, with reference to figure 9, Andrews shows Administrative means 32A (claimed application server) coupled to the central controller 30A'. (Claimed application server (means) couplable to and configured to communicate with the MCU).

Regarding claim 35, with reference to figure 9, Andrews shows Administrative means 32A (claimed application server) coupled to primary the central controller 30A'. (Claimed application server couplable to at least one of the primary and secondary MCUs).

Regarding claims 6, 16, 26, with reference to figure 9, Andrews shows a secondary central controller 30B' coupled to Internet 408. (Claimed MCU (means as in claim 26)) is a primary MCU and the distributed switching platform (means as in claim 26) further comprising a secondary MCU couplable to the IP network).

Regarding claims 8, 18, 28 and 36, with reference to figure 9, Andrews discloses a primary and a redundant central controllers 32A and 32B' respectively. Further, Andrews discloses a "hot-standby approach" in which a redundant controller is idle while the primary controller control the system. See column 9, lines 32-35. (Claimed only one primary and secondary MCUs provides the call and call processing commands at anytime, the one of the primary and secondary MCUs being in control of the enterprise call center).

Regarding claims 7, 17, 27, with reference to figure 5, Andrews discloses that the primary central controller and the redundant central controller are geographically separated. See column 9, lines 7-9.

Regarding claims 9, 19 and 29, Andrews discloses the hot-standby approach in which a redundant controller is idle while the primary controller control the system. See column 9, lines 32-35. Further, Andrew discloses updating and or changing the system configuration data stored in the central controller database by the central controller. See column 7, lines 24-29.

Regarding claim 33, with reference to figure 12, Andrews shows the call center 501 is coupled to the primary and the standby controllers through a WAN interface.

(Claimed first switching partition is coupled to a third location associated with the IP network)

Regarding claim 37, with reference to figure 9, Andrews discloses a primary and a redundant central controllers 32A and 32B' respectively. Further, Andrews discloses a "hot-standby approach" in which a redundant controller is idle while the primary controller control the system. See column 9, lines 32-39. (Examiner interpreted the Claimed only one primary and secondary MCUs provides the call and call processing commands at anytime, the one of the primary and secondary MCUs being in control of the enterprise call center).

Andrews discloses the hot-standby approach in which a redundant controller is idle while the primary controller control the system. See column 9, lines 32-35. Further, Andrew discloses updating and or changing the system configuration data stored in the central controller database by the central controller. See column 7, lines 24-29.

Regarding claim 37, with reference to figure 9, Andrews discloses a primary and a redundant central controllers 32A and 32B' respectively. Further, Andrews discloses a "hot-standby approach" in which a redundant controller is idle while the primary controller control the system. See column 9, lines 32-39. In addition, Andrew discloses updating and or changing the system configuration data stored in the central controller database by the central controller. See column 7, lines 24-29. (Claimed one of primary and secondary MCUs which is in control of the enterprise call center updates a database associated with the other one of the primary and secondary MCUs).

Regarding claim 38, Andrews discloses that caller are connected through an SS7 based network. See column 5, lines 21-27. (Claimed enterprise call center is coupled to PSTN via one of the access nodes).

Regarding claim 40, Andrews discloses that the functional components can be embodied as one or more computer program processes running on one or more general purpose computers. See column 15, lines 17-47. (Claimed wherein the enterprise call center of claim 31, at least one of the primary and secondary MCUs and switching partition are embodied in a sequence of instructions executable on a general purpose computer).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 2, 10, 12, 20, 22, 30, 32 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andrews in view of Darland et al, US 2003/0128698. Hereinafter referred to as Darland.

Regarding claims 2, 12, 22, and 32, Andrews discloses all the limitation of respective parent claims 1, 11, 21 and 31 as discussed above.

The difference between Andrews and claims 2, 12, 22, 32 is that Andrews whiles discloses using a TCP/IP protocols for communicating between the controller unit and

the "switching partition" as discussed above (see also figure 10 for internet interface to the controller 472), it does specify using a user datagram Protocol for communicating between the controller and the switching partition.

However, Darland discloses using UDP/IP protocol for communicating between a switch controller and ISN component (call center). See paragraph [0042]. It would have been obvious to a person of ordinary skill in the art, at the time the invention was made to use the UDP/IP protocol for communicating between the controllers of Andrews and the call service center 501 (figure 12) (claimed switching partition) using the UDP/IP communicating method of Darland so that fast exchange of control signals can be provided by eliminating the TCP signaling bandwidth consumption due to signaling feature implied by using the TCP/IP standard. It is also advantageous to use the UDP/IP protocol in case of voice calling services using the Internet.

Regarding claims 10, 20, 30, and 39, as discussed above with reference to the parent respective base claims 1, 11, 21 and 31, Andrews discloses service center (claimed switching partition comprising an IOD and a circuit-switched matrix and line interface that provides an interface to the plurality of access node). Andrews does not disclose a second service center, (claimed second switching partition comprising a second IOD and a second circuit-switched matrix and line interface coupled to the second IOD that provides an interface to additional access node).

However, with reference to figures 1and 15 Darland discloses a call center 108a connected to a call center112b (Intelligent Services networks INS#1 and INS#2) through a WAN (Wide Area Network) connection. See paragraph [0207].

Therefore, It would have been obvious to a person of ordinary skill in the art, at the time the invention was made to have other service centers similar to service center 501 (figure 12) of Andrews interconnected using the WAN interface 472 (Figure 12) as taught by Darland so to provide the calling services to subscribers belonging to the other call centers. A skilled person would recognize the desirability to create other call center to accommodate an increasing number of calling services requests.

4. Claims 4, 14, 24 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andrews in view of Sonesh et al, US (6,614,783). Hereinafter referred to as Sonesh.

Regarding claims 4, 14, 24 and 34, Andrews discloses access node of being access nodes belonging to a variety of networks, comprising SS7 and TCP/IP based networks among others, see column 4, lines 55-64 and column 5, lines 21-27,

However, Andrews does not specify that the access nodes are selected from a group consisting of a digital instrument, analogue instrument, analog trunk and digital trunk.

However, with reference to figure 1, Sonesh shows in the same field of endeavor of calling centers, a telephone 104 communicating aver the PSTN 111, wherein the link between the telephone and the PSTN may be an analogue trunk or digital trunk. See column 7, lines 62-65. (Claimed digital instrument, analogue instrument, analog trunk and digital trunk).

It would have been obvious to a person of ordinary skill in the art, at the time the invention was made to have the access node of Andrews being those of Sonesh. A person of skill in the art would do so by recognizing the benefit of providing a variety of calling services to a mix of subscribers to POT (Plain Old Telephony) services and internet telephony services regardless of the geographical location of the subscribers (Andrews, column 5, lines 19-27). The benefit would be the ability to generate more revenues by the provisioning of calling services by Andrews's system to the variety of networks regardless of the type of access nodes in use by the variety the networks (Andrews, column 5, lines 19-27).

Response to Arguments

5. Applicant's arguments filed 11/10/2005 have been fully considered but they are not persuasive.

Applicant argues that Andrews doesn't anticipate the claimed invention as in independent claim 1,11, 21, and 31. In particular, Applicant argues on page 10 and 11 that "*Andrews does not teach an input-output distributor (IOD) that receives call and control processing commands in a packet based protocol and conveys these commands to a circuit-switched matrix and line interface to allow, based on those commands, the circuit switched matrix and line interface to control access to a plurality of access nodes*". Similarly Applicant argues that:

"*Andrews discloses central controllers that generate control signals for controlling calls from callers to agents. see column 4, line 62-67;colllmn 14, lines 13-21; Figure 1 and*

Figure 12.). the control signals, however, do not control access to a plurality of access nodes as recited in Claims 1, 11, 21 and31. On the contrary, as mentioned above, the control signals in Andrews control the calls from callers (i.e., caller 1 and caller 2 of Figure 12) to the appropriate agents or caller service. The Applicant does not find where Andrew teaches the control signals control access to the callers. Thus, Andrews does not teach an input-output distributor (IOD) that receives call and control processing commands in a packet based protocol and conveys these commands to a circuit-switched matrix and line interface to allow, based on those commands, the circuit-switched matrix and line interface to control access to a plurality of access nodes as recited in independent Claims 1, 11, 21 and 31". Emphasis added.

Examiner respectfully disagrees, and prior to responding to Applicant's argument, the following need t o be addressed. First, the claimed "access nodes" as described in the specification are not restricted to a "caller", the specification refers to access nodes as, "*digital or analogue instruments, such as digital or analogue telephony devices, trunks (digital or analogue) or any telephony resource (e.g, a conference bridge)", see specification, page 12, lines 17-20. Second an example of the "call and control processing commands" was given in the specification as a (call set-up and tear down commands",* see specification page 12, lines 21-22.

Therefore, given the interpretation of the claimed limitations in view of the specification, Examiner conclude that by having the central controller generate control signals for controlling distribution of calls, reads on the claimed "main control unit (MCU) ... configured to generate call and control processing commands", in addition if

the central controller generates control signal for call distributions it imply a cell set up among other commands, also Andrew stated that "**substantially all the call routing "intelligence" resides in the central controller, ..., the central controllers may be used to optimally control many different types of call routing and/or switching hardware**" see column 14, 39-47. This passage clearly shows Andrews implicitly teach the teardown of calls. Therefore, contrary to Applicant, Andrews does teaches the control signals also control access to the callers (claimed access nodes) as well.

Since Andrews teaches all the other limitations of claims 1, 11, 21 and 31. Andrews anticipates the claimed invention as shown in the rejections above.

As to claims 2, 10, 12, 20, 22, 30, 32, and 39, Applicant argues a *prima facie* case of obviousness was not provided, because that these claims depend from respective base claims 1, 11, 21 and 31. Examiner respectfully disagrees, as indicated in the argument above, Andrews does anticipate the claimed invention as presented in the independent claims, and since Andrews teaches the claimed limitations of independent claims, Darland as indicated above cure the deficiencies of Andrews with regard to the dependent claims 2, 10, 12, 20, 22, 30, 32, and 39.

As to claims 4, 14, 24 and 34, Applicant lacks argument regarding these claims (Sonesh in view of Andrews). Examiner believes that the rejection above is proper, based on the most reasonable broadest interpretation of the claim limitations.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (571) 272-3097. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kizou Hassan can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM
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